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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,907	10/03/2005	Mikio Fukuda	SAIT-4396	6244

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EXAMINER	
JAMAL, ALEXANDER	
ART UNIT	**PAPER NUMBER**
2614	

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04/30/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/551,907	FUKUDA ET AL.	
	Examiner	Art Unit	
	ALEXANDER JAMAL	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 January 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Based upon the submitted amendment, the examiner notes that claims 2,3,6-8,11-17 have been amended.

2. The examiner submits a new set of non-final rejections based on new prior art.

3. Based on applicant's submitted comments, the examiner withdraws the objections to the drawings and the 112 first paragraph rejections to claims 7,8,17.

4. As per applicant's comments regarding the 112 second paragraph rejection to claims 1-17, the examiner notes that applicant's specification/drawings do not provide any details of the electrical interconnections in the handset which facilitate 'connecting said amplifier to an AC adaptor' as claimed. The examiner reads this phrase as meaning the handset comprises an AC power adaptor that performs the conventional function of providing power to circuitry (including the amplifier) in the handset.

5. The DC jack of claim 2 is read specifically as a conventional AC/DC adaptor.

6. Based on the above comments the examiner withdraws the 112 second paragraph rejection to all claims.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined

application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-17 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6728374 in view of Thomke et al (4817138).

As per application **claim 1**, patent claim 1 recites a telephone handset with a bone conduction speaker but does not specify the amplifier, AC/DC adaptor to supply power (via a cord) and an additional cord to couple the handset to the rest of the telephone system.

Thomke teaches a telephone handset comprising an enclosure (Fig. 1) for the enclosed speaker, an amplifier (inherent to speech circuitry 80 in Fig. 3 to drive the speaker, and AC/DC adaptor, and a cord to couple the phone to the phoneline, and a cord to couple a second handset to the main body-handset (fig.1).

The examiner contends it would have been obvious to implement an enclosure for the purpose of supporting/protecting the claimed handset (inherent to enclosures), an amplifier to drive the output signal to the speaker, and the disclosed cabling connection for the purpose of coupling the disclosed functional components (such as the AC/DC adaptor and the handset circuitry).

As per **claims 2,3,** it would have been obvious to provide the means (such as a jack and plug) to couple the AC adaptor to an AC power source and to the phone for the purpose powering the phone.

As per **claims 4,9,10, t**he phone comprises an on-off actuation switch implemented with button 56 (Fig. 1). This switch will provide or remove power from the device (including the transmit/receive amplifiers).

As per **claim 5,** the on/off switch is actuated by the handset being rested on the base/handset.

As per **claims 6,11,12,13,14,15,16,** the speaker of the phone system of Thomke is exposed to the outside via a grill in the enclosure (fig. 1).

As per **claims 7,8,17**, it would have been obvious to implement the pivoting and slideably extendable speaker in the device of the patent as per the teachings of Pralus and Matsunaga as per the claim rejections below.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 1-6,9-16** rejected under 35 U.S.C. 103(a) as being unpatentable over Thomke et al (4817138), and further in view of applicant's admitted prior art (specification).

As per **claim 1,** Thomke discloses a phone (inherently comprising a transmitter/receiver) comprising a handset and a base that is also a handset. Both handsets have openings for a microphone and speaker (Fig. 1). The handset comprises casing 28 (Fig 1) that contains speech circuit 80 (Fig. 3) which inherently comprises transmit/receive amplifiers for the purpose of driving the speakers and amplifying the received signals from the microphones. The device may be configured with a secondary handset that contains the microphone, speaker, and transmit/receive circuitry (which inherently comprises amplifiers) (Col 9 lines 30-40). The handset further comprises an AC adaptor (AC/DC converter) with a cord and connection to the mains (a standard AC power outlet) with a further cord going to the base unit. The 'cord connecting the amplifier to the AC adaptor' as per applicant's claims, may be read as the cord coming from the mains to the secondary handset, or the additional disclosed cord from the handset to the handset/base unit providing power to the speech circuit (which also comprises amplifiers for the microphone/speaker). The phone comprises a cord 10 (Fig. 1) from a handset to a main body, and also cord 4 with plug 6 that may fit into a 'telephone main body'. The examiner reads a telephone main body as any network component into which a handset plugs into. However, Thomke does not disclose a bone conduction speaker used in either handset speaker.

Applicant's admitted prior art (background section) discloses that bone conductions speakers used in phone handsets are well known in the art and comprise the

advantage of the user being able to hear the incoming sounds more clearly in noisy environments. It would have been obvious to one of ordinary skill in the art at the time of this application to implement a bone conduction speaker with the speech circuit driving circuitry of Thomke for the advantage of improved hearing in noisy environments.

As per **claims 2,3,** the disclosed AC/DC adaptor inherently comprises a DC jack (DC interface, such as a wall outlet). The plug would be coupled to the jack in 'an insertion manner' in the same way as a standard AC/DC converter.

As per **claims 4,9,10, t**he phone comprises an on-off actuation switch implemented with button 56 (Fig. 1). This switch will provide or remove power from the device (including the transmit/receive amplifiers).

As per **claim 5,** the on/off switch is actuated by the handset being rested on the base/handset.

As per **claims 6,11,12,13,14,15,16,** the speaker of the phone system of Thomke is exposed to the outside via a grill in the enclosure (fig. 1).

5. **Claims 1,6,7,8,17,11,12,13,14,15,16,** rejected under 35 U.S.C. 103(a) as being unpatentable over Thomke et al (4817138), and further in view of Pralus et al. (6055312) and further in view of Matsunaga et al. (US 20020012441 A1).

As per **claim 1,** Thomke discloses a phone (inherently comprising a transmitter/receiver) comprising a handset and a base that is also a handset. Both

handsets have openings for a microphone and speaker (Fig. 1). The handset comprises casing 28 (Fig 1) that contains speech circuit 80 (Fig. 3) which inherently comprises transmit/receive amplifiers for the purpose of driving the speakers and amplifying the received signals from the microphones. The device may be configured with a secondary handset that contains the microphone, speaker, and transmit/receive circuitry (which inherently comprises amplifiers) (Col 9 lines 30-40). The handset further comprises an AC adaptor (AC/DC converter) with a cord and connection to the mains (a standard AC power outlet) with a further cord going to the base unit. The 'cord connecting the amplifier to the AC adaptor' as per applicant's claims, may be read as the cord coming from the mains to the secondary handset, or the additional disclosed cord from the handset to the handset/base unit providing power to the speech circuit (which also comprises amplifiers for the microphone/speaker). The phone comprises a cord 10 (Fig. 1) from a handset to a main body, and also cord 4 with plug 6 that may fit into a 'telephone main body'. The examiner reads a telephone main body as any network component into which a handset plugs into. However, Thomke does not disclose a bone conduction speaker used in either handset speaker.

Pralus discloses a telephone handset that may be converted into a headset or may be longitudinally adjusted based on a sliding connection between the speaker and the handset body. It would have been obvious to one skilled in the art to implement a slideable mechanism for the purpose of allowing greater configurability of the handset (abstract Fig. 1a).

Matsunaga discloses an adjustable speaker used in a communications device (abstract, fig. 1) in order to allow greater configurability of the speaker in order to isolate the speaker output from the environment sounds. The speaker may be a bone conduction speaker (para. 19). It would have been obvious to one skilled in the art to use the adjustable bone conduction speaker in a handset/headset for the advantages inherent to bone conduction transducers, and also to allow for the configurability of the speaker in the handset/headset.

As per **claims 6,11,12,13,14,15,16,** the speaker of the phone system of Thomke is exposed to the outside via a grill in the enclosure (fig. 1).

As per **claims 7,** Matsunaga discloses the speaker engaging a hole (part of joint 16 in Fig. 1) which allows the speaker to move in a spherical motion.

As per **claims 8, 17,** Pralus discloses the speaker sliding and extendable in a longitudinal direction.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Jamal whose telephone number is 571-272-7498. The examiner can normally be reached on M-F 9AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis A Kuntz can be reached on 571-272-7499. The fax phone numbers for the organization where this application or proceeding is assigned are **571-273-8300** for regular communications and **571-273-8300** for After Final communications.

/Alexander Jamal/

Primary Examiner, Art Unit 2614

Examiner Alexander Jamal

April 29, 2009